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Published data and documents relating to the Environmental Restoration Program are available for public review in information repositories at four locations. The current information repositories are located in the cities of Boron, Lancaster and Rosamond, as well as Edwards AFB. They are updated when new documents are released.

If you have any questions about information in the repositories, please contact Gary Hatch, Environmental Public Affairs at (661) 277-1454 or through e-mail at gary.hatch@edwards.af.mil.



Location	Days and Hours of Operation	
Edwards AFB Library 5 W. Yeager Blvd. Building 6225 Edwards AFB, Calif. (661) 275-2665	Mon-Thurs Fri. Sat & Sun	9:30 a.m. - 7 p.m. 9:30 a.m. - 6 p.m. 10:30 a.m. - 6 p.m.
Kern County Public Library Wanda Kirk Branch 3611 Rosamond Blvd. Rosamond, Calif. (661) 256-3236	Tue & Wed Thu-Sat	Noon - 8 p.m. 10 a.m. - 6 p.m.
Los Angeles County Public Library 601 W. Lancaster Blvd. Lancaster, Calif. (661) 948-5029	Mon-Wed Thu & Fri Sat	10 a.m. - 8 p.m. 10 a.m. - 5 p.m. 11 a.m. - 5 p.m.
Col. Vernon P. Saxon, Jr. Aerospace Museum 26962 Twenty Mule Team Road Boron, Calif. (760) 762-6600	Mon-Sun	10 a.m. - 4 p.m.

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Report to Stakeholders Staff

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April 2005

99TH AIR BASE WING
Edwards AFB
California

Volume 10 No. 4

INSIDE

In this issue . . .

2

Read about what a Proposed Plan is and what happens if there is a new circumstance after the signing of the Record of Decision.

3

The desert cymopterus is out in bloom. But would you know the difference between it and the Mojave parsley?

4

RAB enters 10 years of service at Edwards Air Force Base.



OLD TOWN — A photograph of the central section of Muroc in 1928. The Railroad water tank is in the foreground, and to the right of it, in the background, is Charlie Anderson's house and store. The railroad depot, the Hisquierdos' home, and section houses are located among the trees in the background.

Artifacts attest to Muroc's final days

New information about the postwar past of Muroc was recently uncovered when archaeologists excavated an area involved in the proposed realignment of the runway adjacent to the Main Base flightline at Edwards Air Force Base (AFB).

While a full report of their findings awaits completion, archaeologists have begun to catalog items pulled from 35 excavated units that tell about the day-to-day life of homesteaders, railroad employees and military workers who lived in the town in its last days, from about 1946 to the early 1950s.

The excavations occurred in the southern section of what was the old town of Muroc. The artifact collection includes items from a 1920s

- 40s homestead, a Veterans of Foreign Wars (VFW) hall, a refuse deposit with debris from the dismantling of the town, and several housing units that were moved from the World War II American-Japanese internment camp at Manzanar and reassembled to be used as housing for the military at Edwards.

"The excavations involved about 20 percent of what was the community of Muroc," said Rick Norwood, base archaeologist. "What we're doing is looking at the physical evidence of Muroc and that will help us support or refute what's in the historical record."

Artifacts have been brought back to the cultural resources laboratory where they will be analyzed and cataloged.

See Muroc page 6



If you have a question about the Edwards Air Force Base Environmental Management program, you may address it to Stakeholders Forum, Attn: Gary Hatch or Miriam Harmon, 5 E. Popson Ave., Edwards AFB, CA 93524-8060, or send e-mail to: afftc.em.com.rel@edwards.af.mil

Next RAB Meeting

May 19, 2005

5:30 p.m.

Lancaster

Location

To be determined

The public is invited.



SNEAK PEEK — A Bailey Elementary School student takes a look through a scope at birds spotted near Piute Ponds, while her classmates line up behind her for a turn.

First graders take a good look at *nature*

Just before the rains began last year, Bailey Elementary School first grade teacher Kristie Grubb took her class to Piute Ponds for a birdwatching extravaganza.

It was there that her students were able to experience the outdoors and see a variety of birds that either live at the ponds or migrate through the area. Piute Ponds — located southwest of Rogers Dry Lake on Edwards AFB — is a haven for birds.

Students used binoculars and telescopes to get a close-up view of the birds in the area, while Andrea Currylow, an Environmental Management Division contract biologist explained what types of birds can be found at the ponds as well as nesting habits.

If you are interested in a tour of Piute Ponds, contact EM at (661) 277-1401.

Report to Stakeholders is a publication of the Edwards AFB Environmental Management Division. Its purpose is to inform and educate the public, base workers and residents about continuing Environmental Management efforts at Edwards AFB. It currently has a circulation of 6,000, including about 2,000 subscribers.

Contents of the *Report to Stakeholders* are not necessarily the official view of, or endorsed by, the U.S. government, the Department of Defense, or the Department of the Air Force.



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Base Civil Engineer..... James Judkins
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Branch Chief Environmental Conservation..... Gerald Callahan
Branch Chief Environmental Quality..... Robert Shirley

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Report to
STAKEHOLDERS



Among the former residents who experienced life in Muroc during its last days was Ray Hisquierdo. The son of Mexican immigrants, Hisquierdo grew up in Muroc. His father was the section crew foreman for the Santa Fe Railroad.

"There was no town," recalled Hisquierdo, a Muroc resident from the late 1920s to 1944. "There was just a general store and a post office, and that was it." He attended Muroc grammar school with his 11 siblings and lived in a "big house" provided by the Santa Fe Railroad next to the tracks. The house "had three roofs, which made it cool without an air-conditioner." He left Muroc when he joined the army in 1944.

There was no crime in Muroc and the Great Depression didn't affect the Santa Fe employees, Hisquierdo said. People in Muroc "were homesteaders and they didn't like the city. Most of them came from back east ... and they lived how they wanted to and raised their families the way they wanted to."

Others remembered the town in much the same way. David Mertz, the son of an early Muroc homesteader, Harold Mertz, who migrated to the area after World War I, recalls that living in Muroc "was simple." The family owned and operated Muroc's gas station and store. Describing living conditions, Mertz said, "It is kind of interesting, you (might) think that it was kind of a *Grapes of Wrath* thing, but to us this was what we thought America was all about ... You lived off the land and you grew a little ... Most of the people who lived in Muroc



WHAT DO WE HAVE HERE? — Environmental Management Division contract archeologists Jim Johannesmeyer, left, and Cole Parker catalog and analyze the artifacts that were recovered during the Muroc excavation.

did for themselves."

Dances and social gatherings at Muroc's grammar school, gliders and car races on the dry lakebed, military bombing practice, hunting, ranching, mining and moonshining activities were also recalled in the oral history memories of these two. As boys, their days were varied and unpredictable. One day might be spent hunting rabbits (yearlings were the best eating) or coyotes. Skins were sold for \$1, \$3 or even \$5 to a traveling merchant. The next day they might be drinking an ice cold Coke with technicians from BFGoodrich out from the city to test their tires' performance on the hot lakebed's surface.

Like Hisquierdo, Mertz left Muroc when he joined the military in World War II. By the time they returned from

the war, the land that had comprised the town had been purchased by the Army for what would later become Edwards AFB. By then, most of the town was being dismantled.

The artifacts found in recent excavations at Muroc have been recovered to shed new light on the community's last days.

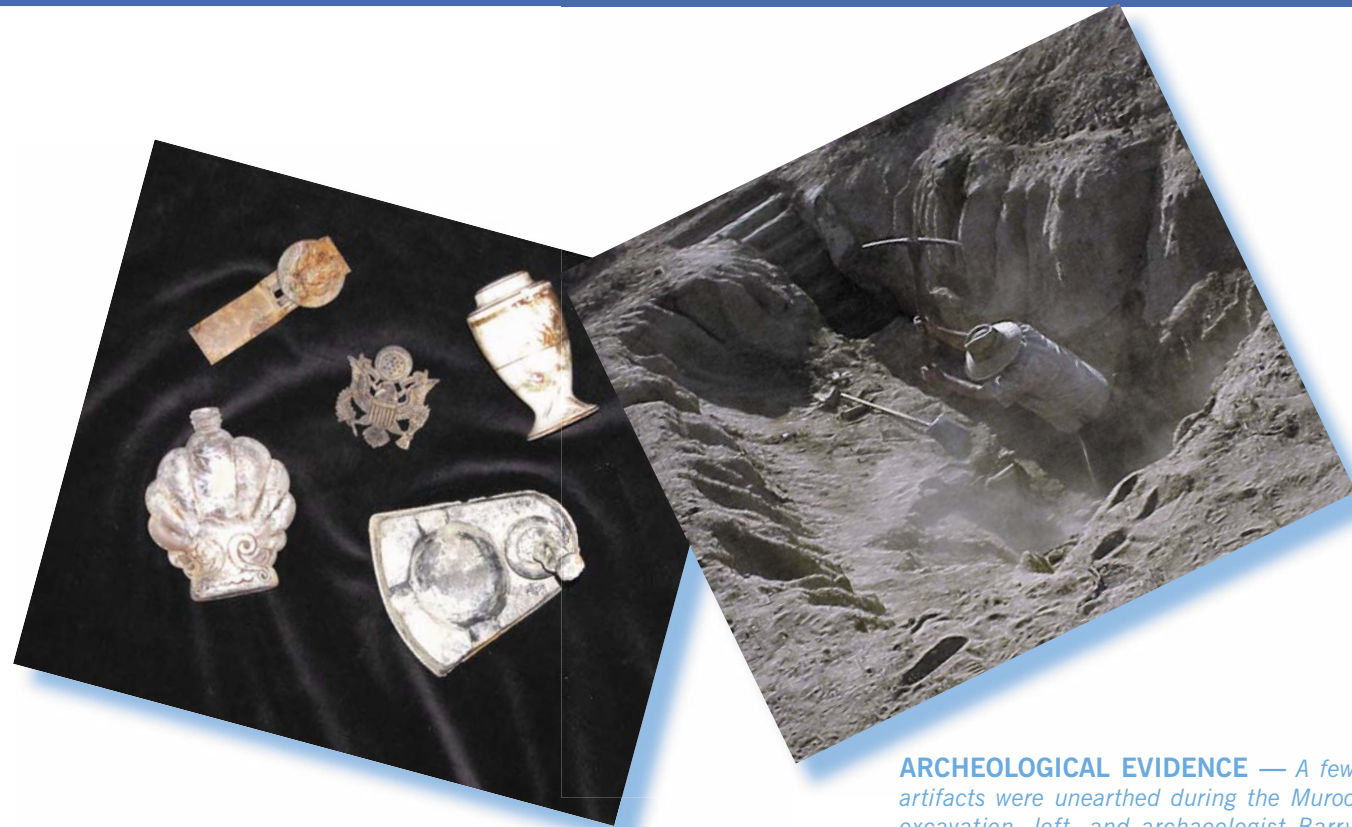
"The archival and oral histories, like the 1998 study, provide an overview and context for understanding Muroc, but they do not tell you what's underground," Norwood said. "Basically these reports are looking at historical sources and synthesizing them to try to tell the story of Muroc from a historical perspective. This differs from archaeology. What archaeologists do is look at the physical evidence to see if it supports historical knowledge."

RAB Meeting Highlights

The following report highlights the latest quarterly meeting of the RAB, held Feb. 17 at Rosamond, Calif.

/// **Proposed Plan NASA Dryden Operable Unit (OU) 6** — Restoration Program Manager Tom Merendini presented information on the Proposed Plan for OU6, NASA Dryden. Past treatability studies at Sites N2, N3 and N7 included soil vapor extraction with air sparging, dual extraction and chemical oxidation. The primary contaminants of concern

at these sites are the solvents trichloroethylene (TCE) and carbon tetrachloride, and fuel constituents benzene, toluene, ethylbenzene, and xylene (BTEX). Merendini said that there are five alternatives that the Edwards AFB ERP have proposed, and that alternative four — source control and hydrologic control with groundwater monitoring and land use controls — is the preferred option. A public comment period for the OU6 proposed plan is scheduled to begin in late March or early April, and will last 45 days. A public meeting will also be held during the public comment period.



ARCHEOLOGICAL EVIDENCE — A few artifacts were unearthed during the Muroc excavation, left, and archaeologist Barry Boyer, right, is pictured here digging at the Muroc site on Edwards AFB.

MUROC

FROM page 1

“It will take some time to interpret what was found,” Norwood said. “Land records and other historical documents of the time period must be researched and assembled into a report of findings. All this work is currently in progress.”

Founded in 1883, Muroc originated as a water stop for the railroad in the Mojave Desert on the Santa Fe route from San Francisco to Chicago. At that time the railroad line ran across Rogers Dry Lake (rerouted around the lakebed in 1953).

The original town site, located at the western edge of the dry lake, took advantage of water sources there to supply the railroad’s steam engines. A water tank and station house were erected at Muroc for the railroad’s section crew, which maintained about 20 miles of track between Muroc and the community of Boron. By the late 1920s, a grammar school and section houses

to accommodate the railroad crew and their families had been built. Miners, early homesteaders and, following World War I, entrepreneurs who found opportunity in the area added a grocery store, gas station, convenience store, cafe, the VFW hall, and other private residences to the mix of scattered structures.

The military came to the area in 1928. In 1935, Rogers Dry Lake was dedicated for military use, and shortly thereafter a bombing and gunnery range called East Camp, used to train bombing crews during World War II, was established.

Archaeological work is routinely done ahead of the start of construction projects at Edwards in order to comply with federal environmental laws that protect cultural resources. The recent excavations took place as part of the management of cultural resources at Edwards AFB.

These laws protect artifacts from vandalism and illegal collecting activity and ensure that they are available for study by trained archaeologists. Know-

ing the exact location of an artifact is critical to unlocking the historical value of the item based on its context in the present day environment. Therefore, if an artifact is encountered in the desert of Edwards AFB, it is best to leave it in its place and notify the base historic preservation officer at the EM Division office of its location.

This is not the first cultural resource project involving Muroc. According to Norwood, about 25 percent of the base has been sampled to compare similar sites and identify those that are eligible for the National Register of Historic Places. Under this management plan, previous studies of Muroc were completed in 1988, 1998 and 1999.

The 1998 report provided an overview of the Muroc community, based on historic documents and oral histories of former Muroc residents collected as part of a grant-funded “Legacy” program. This study portrays Muroc as characterized by frontier self-reliance and a sense of place.

Desert cymopterus sometimes mistaken for Mojave parsley



CARROT FAMILY
The Mojave parsley, left, and the desert cymopterus, bottom, can be mistaken for one another at times. Both are members of the same plant family. The difference between the two can be seen in their flowers.

The desert cymopterus, also known as the desert parsley, is a plant that can be found at Edwards AFB. However, it can oftentimes be mistaken for the similar looking Mojave parsley.

Both plants stem from the *apiaceae* family, or carrot family, and the significant difference between the two is found in the way their flowers bloom.

The desert cymopterus is a long-lived perennial plant that grows no higher than 6 inches and its blooms — which are spherical in shape — are visible between the months of February to May, or earlier. There can also be seasons when the plants produce leaves and no flowers.

The leaves of the desert cymopterus are a light silvery green color with long slender deep taproots that germinate even when there isn’t enough rainfall. This taproot allows the desert cymopterus to survive multiple drought years.

The Mojave parsley’s flowers grow in multiple small bunches from each main stalk. Its leaves are also a light silvery green, but grows in bunches. The blooming season of the Mojave parsley is about the same as the desert cymopterus.



Desert cymopterus are usually found in deep, loose, well drained, fine to coarse sandy soils in alluvial fans and basins on flats and slopes. The desert cymopterus can be found in creosote bush scrub, saltbush scrub, and Joshua tree woodland communities. Their elevations can range from 2,000 to 3,000 feet, while Mojave parsley ranges from 2,000 to 7,000 feet. Mojave parsley is also more common in higher clay content soil or rocky areas.

Last year, the desert cymopterus was taken off a petition list for the Endangered Species Act because it was determined by the U.S. Fish and Wildlife Service that a sufficient amount of the desert cymopterus population exists. Edwards AFB does keep track of core populations of desert cymopterus. ■

RAB enters 10th year of service at Edwards AFB



BEGINNINGS
Group photo of one of the early Restoration Advisory Boards at Edwards AFB in 1995.

For more than a decade the 14 community volunteers who make up the Edwards AFB Restoration Advisory Board (RAB) have been a voice for the public in the Environmental Restoration Program (ERP). This year, the RAB celebrates 10 years of service.

The RAB's purpose is to provide two-way communication between the public and the officials responsible for cleanup at Edwards AFB. The board provides a platform for community involvement in the cleanup at the base and holds quarterly meetings that the public is invited to attend.

Concerns and recommendations from RAB members have made a difference in reordering funding priorities for cleanup projects at Edwards.

As one former RAB member noted: "Without the RAB, the Air Force might turn their attention to aspects of cleanup that are removed from community concerns."

Thanks to the RAB, that isn't the case. When perchlorate, an accelerant used in rocket fuel, had gotten into the shallow groundwater at North Base, the RAB expressed concern that it might eventually reach the nearby community of North Edwards. As a result, the Air Force funded \$1.5 million for perchlorate groundwater treatability studies at Site 285.

Another time, in 1996, former RAB member Billy Ray Hughes got down into an old grease pit to get a closer look. He discovered that what was thought to be drains were actually electrical plugs. Because of his concerns, the ERP cleaned out the old grease pit and checked its integrity. Without the RAB,

these types of concerns may not have been identified.

The Edwards RAB was formed in late 1994 and replaced the earlier Technical Review Committee (TRC) established to provide public input on cleanup activities at Edwards AFB. The TRC came into being after the base was named to the National Priorities List and began cleaning up hazardous waste sites under the guidance of the Installation Restoration Program (now the Environmental Restoration Program).

Environmental Management Division Chief Robert Wood, who has been involved with the RAB since its inception, believes that the Edwards RAB's success is rooted in teamwork. "The RAB's membership has always been diverse," he said. "The RAB was established to reflect the communities that are neighbors to the base and those who are residents and workers on the base. With all the various backgrounds represented by the word 'public,' it's a tribute to those who have served on the RAB that teamwork was never a challenge."

Overall, a RAB team is composed of representatives from the Department of Defense (DoD), the U.S. Environmental Protection Agency (U.S. EPA), state government agencies, tribal governments, the local community and local government agencies.

The RAB is a mix of environmental professionals and public representatives. Community members represent cities surrounding the base and organizations operating on base. At Edwards there are currently 12 RAB representatives and two alternates from local communities and local government



MEMBERS OF THE BOARD — Above are all the members of the Restoration Advisory Board at Edwards AFB, along with the location they represent. For any environmental restoration questions, contact your local representative. Member contact information is located on page 8 of this newsletter.

agencies. The rest of the RAB team is composed of the DoD, the U.S. EPA, and state government agencies being the Department of Toxic Substances Control and the Lahontan Regional Water Quality Control Board.

Current RAB members include two college science professors, the president of a water district and an editor at a local newspaper. Other RAB members have distinguished professional backgrounds and are prominent in the workplace and their communities.

In addition to teamwork, RAB members display a willingness to learn about the cleanup program at Edwards AFB by various efforts

like reading about the cleanup program and its technologies through newsletters, the base newspaper, attending quarterly RAB meetings and attending a yearly RAB academy — where ERP managers give training.

"It is important for communities to be aware and educated about the cleanup processes on base," Base Housing representative Amy Bouchard said. "They need to know what is going on around them, what is in the ground and why, so that they don't think anything is being kept from them. It's important to know all sides of the arena. That is why the RAB is an integral part of the restoration program at Edwards."